ATTACHMENT D

SUMMARY OF GROUND WATER MONITORING DATA

(2004)

GLOBAL PETROLEUM CORPORATION

NPDES PERMIT NO. MA0003425

Global Petroleum Corporation 140 Lee Burbank Highway, Revere, Massachusetts NPDES Exclusion 98-086 Groundwater Treatment System Influent/Effluent Testing Results

Date		Apr-(04	May-	04	Jun-04	
Parameter	NPDES Limit	Influent	Effluent	Influent	Effluent	Influent	Effluent
TPH	5 ppm	20.5 mg/l	ND mg/l	2.8 mg/l	ND mg/l	0.66 mg/l	ND mg/l
Methyl Butyl Tert Ether	70 ppb	862,000 ug/l	1.3 ug/l	3,540 ug/l	ND ug/l	47,000 ug/l	ND ug/l
Benzene	5 ppb	4,640 ug/l	ND ug/l	362 ug/l	ND ug/l	1,920 ug/l	ND ug/l
Toluene	*	14,500 ug/l	ND ug/l	2,920 ug/l	ND ug/l	2,190 ug/l	ND ug/l
Ethylbenzene	*	899 ug/l	ND ug/l	269 ug/l	ND ug/l	326 ug/l	ND ug/l
Xylenes	*	9,170 ug/l	ND ug/l	5,860 ug/l	ND ug/l	4,940 ug/l	ND ug/l
Total BTEX	100 ppb	29,209 ug/i	ND ug/l	9,411 ug/l	ND ug/l	9,376 ug/l	ND ug/i



Technical Report for

Camp Dresser & McKee

Global Petroleum, Revere MA

Accutest Job Number: M39312

Sampling Dates: 05/04/04 - 05/07/04

Report to:

Camp Dresser & McKee 50 Hampshire Street Cambridge, MA 02139

ATTN: James H. Winkler

Total number of pages in report: 30



Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.

Reza Yand Lab Director

Certifications: MA (M-MA136) CT (PH-0109) NH (250203) RI (00071) ME (MA136) FL (E87579) NY (11791) NJ (MA926) IL (000589) NAVY USACE

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SAMPLE DELIVERY GROUP CASE NARRATIVE

Client: Camp Dresser & McKee Job No:

M39312

Site:

Global Petroleum, Revere MA

Report Date

5/20/2004 12:39:50 P

6 Sample(s) were collected on between 05/07/2004 and were received at Accutest on 05/10/2004 properly preserved, at 1.9 Deg. C and intact. These Samples received an Accutest job number of M39312.A listing of the Laboratory Sample ID, Client Sample ID and dates of collection are presented in the Results Summary Section of this report.

Except as noted below, all method specified calibrations and quality control performance criteria were met for this job. For more information, please refer to QC summary pages.

Volatiles by GC By Method EPA 602

Matrix: AO

Batch ID: GMN1065

- All samples were analyzed within the recommended method holding time.
- Sample(s) M39258-2MS, M39258-2MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.
- Matrix Spike Recovery(s) for Methyl Tert Butyl Ether are outside control limits. Outside control limits due to high level in sample relative to spike amount.

Matrix: AQ

Batch ID: GMN1071

- All samples were analyzed within the recommended method holding time.
- Sample(s) M39391-3MS, M39391-3MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.

Wet Chemistry By Method EPA 418.1

Matrix: AO

Batch ID:

GP4420

- All samples were distilled within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- Sample(s) M39312-4MS, M39312-5DUP were used as the QC samples for Petroleum Hydrocarbons, Petroleum Hydrocarbons.
- All method blanks for this batch meet method specific criteria.

The Accutest Laboratories of New England certifies that all analysis were performed within method specification. It is further recommended that this report to be used in its entirety. The Accutest Laboratories of NE, Laboratory Director or assignee as verified by the signature on the cover page has authorized the release of this report(M39312).



Massachusetts Department of Environmental Protection Bureau of Waste Site Cleanup

BWSC-CAM	Exhibit VII A-1
22 May 2003	Revision No. 3.1
Final	Page 13 of 30

Title: MADEP MCP Response Action Analytical Report Certification Form

		MADEP	MCP Analytical Me	thod Report C	ertification Form		
Labo	ratory Name:	Accutest Laborator	ies of New England		Project #:	M39312	
	ect Location:	Global Petroleum, I			MADEP RTN	None	
This	form provides certifica M39312-1,M39312-2 Test method: EPA 60	2,M39312-3,M39312-		·-6			
Samp	le Matrices:	Groundwater X	Soil/Sediment	Drinking Water	Other:	·····	
	MCP SW-846	8260B (8151A ()	833	0 () 6010B	()	7470A/1A ()
	Methods Used	8270C (8081A ()	VPI	·	()	9014M ² ()
	ecified in MADEP	8082 (8021B ()	EPI		3 ()	7196A ()
Analy	endium of lical Methods k all that apply)	2 M - SW-846 Method	ng Number (RTN), if kno 9014 or MADEP Physic s 7000 Series List Indiv	ologically Available	: Cyanide (PAC) Method		
	An affirmative response	onse to questions A	A, B, C, and D is req	uired for "Presi	umptive Certainty st	atus	
Α	Were all samples rec that described on the	Chain-of-Custody d	ocumentation for the	data set?	✓	Yes	□ No ¹
В	Were all QA/QC proof included in this report discuss in a narrative standards or guidelin	t followed, including QC data that did no	the requirement to no	te and	<u></u>	Yes	□ No ¹
С	Does the analytical d for "Presumptive Cer document CAM VII A for the Acquisition an	tainty", as described ,, "Quality Assurance	in Section 2.0 of the and Quality Control	MADEP	V	Yes	□ No ¹
D	VPH and EPH methorsignificant modification			un without	v	Yes	□ No ¹
	A response to ques	tions E and F belov	v is required for "Pro	esumptive Cert	ainty" status		
E	Were all QC performa		recommendations for	the	✓ Refer to Narrative	Yes	☐ No ¹
F	Were results for all armethod(s) reported?		s/elements for the sp	ecified	√ Note: to Natrative	Yes	□ No ¹
1	All Negative respon	ses must be addres	ssed in an attached	Environmental	Laboratory case na	rrative.	
inqui	undersigned, attest ry of those responsi rtical report is, to the	under the pains and	d penalties of perjur e information, the n	y that, based u	pon my personal ed in this		
Sign	ature:	or fall		Position:	Laboratory Directo	or	
Print	ed Name:	Reza Tand		Date:	5/20/04		

Sample Summary

Camp Dresser & McKee

Global Petroleum, Revere MA

Job No:

M39312

Sample Number	Collected Date	Time By	Received	Matr Code		Client Sample ID
M39312-1	05/07/04	12:15 TAN	05/10/04	AQ	Influent	INF-5704
M39312-2	05/07/04	12:20 TAN	05/10/04	AQ	Ground Water	CIN-5704
M39312-3	05/07/04	12:25 TAN	05/10/04	AQ	Ground Water	MID-1-5704
M39312-4	05/07/04	12:30 TAN	05/10/04	AQ	Ground Water	MID-2-5704
M39312-5	05/07/04	12:35 TAN	05/10/04	AQ	Effluent	EFF-5704
M39312-6	05/04/04	14:30 TAN	05/10/04	AQ	Ground Water	ТР

Page 1 of 1

Client Sample ID: INF-5704

Lab Sample ID: Matrix: M39312-1 AQ - Influent **Date Sampled:** 05/07/04 **Date Received:** 05/10/04

Method:

EPA 602

Percent Solids: n/a

Project:

Global Petroleum, Revere MA

	File ID	DF	Analyzed	Ву	Prep Date	Prep Batch	Analytical Batch
Run #1	MN27071.D	1	05/12/04	AP	n/a	n/a	GMN1065
Run #2	MN27144.D	25	05/14/04	AP	n/a	n/a	GMN1071

	Purge Volume		
Run #1	5.0 ml		
Run #2	5.0 ml		

Purgeable Aromatics, MTBE

CAS No.	Compound	Result	RL	Units Q
71-43-2 108-88-3	Benzene Toluene	362 2920 ^a	5	ug/l
100-41-4	Ethylbenzene	269	1.0	ug/l ug/l
1330-20-7 1634-04-4	Xylenes (total) Methyl Tert Butyl Ether	5860 ^a 3540 ^a	8 .	ug/l ug/l
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
	2,3,4-Trifluorotoluene	91%	92%	61-124%

⁽a) Result is from Run# 2

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Page 1 of 1

Client Sample ID: INF-5704

Lab Sample ID: Matrix:

M39312-1 AQ - Influent **Date Sampled:** 05/07/04

Date Received: 05/10/04

Percent Solids: n/a

Project:

Global Petroleum, Revere MA

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	Ву	Method
Petroleum Hydrocarbons	2.8	0.61	mg/l	1	05/12/04	BF	EPA 418.1

Page 1 of 1

Report of Analysis

Client Sample ID: CIN-5704

Lab Sample ID: M39312-2

Matrix:

AQ - Ground Water

DF

1

Date Sampled: 05/07/04

Method:

EPA 602

Date Received: 05/10/04 Percent Solids: n/a

Project:

Global Petroleum, Revere MA

Prep Date Prep Batch Analytical Batch

Run #1

MN27070.D

File ID

Analyzed By 05/12/04 AP

n/a

n/a

GMN1065

Run #2

Purge Volume

Run #1 Run #2 5.0 ml

Purgeable Aromatics, MTBE

CAS No.	Compound	Result	RL	Units Q
71-43-2 108-88-3 100-41-4 1330-20-7 1634-04-4	Benzene Toluene Ethylbenzene Xylenes (total) Methyl Tert Butyl Ether	1.4 1.8 1.1 5.4 16.1	1.0 1.0 1.0 1.0 1.0	ug/l ug/l ug/l ug/l ug/l
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
	2,3,4-Trifluorotoluene	88%		61-124%

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Page 1 of 1

Client Sample ID: CIN-5704

Lab Sample ID:

M39312-2

Matrix:

AQ - Ground Water

Date Sampled: 05/07/04

Date Received: 05/10/04

Project:

Global Petroleum, Revere MA

Percent Solids: n/a

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	$\mathbf{B}\mathbf{y}$	Method
Petroleum Hydrocarbons	< 0.61	0.61	mg/l	1	05/12/04	BF	EPA 418.1

Page 1 of 1

Client Sample ID: MID-1-5704

Lab Sample ID: Matrix:

M39312-3

Method:

AQ - Ground Water

EPA 602

Date Sampled: 05/07/04 Date Received: 05/10/04 Percent Solids: n/a

Global Petroleum, Revere MA

File ID DF Analyzed $\mathbf{B}\mathbf{y}$ **Prep Date Prep Batch Analytical Batch** Run #1 MN27069.D 1 05/12/04 ΑP n/a n/a GMN1065

Run #2

Project:

Purge Volume

Run #1 Run #2

5.0 ml

Purgeable Aromatics, MTBE

CAS No.	Compound	Result	RL	Units Q
71-43-2 108-88-3 100-41-4 1330-20-7 1634-04-4	Benzene Toluene Ethylbenzene Xylenes (total) Methyl Tert Butyl Ether	ND ND ND ND 9.1	1.0 1.0 1.0 1.0 1.0	ug/l ug/l ug/l ug/l ug/l
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
	2,3,4-Trifluorotoluene	86%		61-124%

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Page 1 of 1

Client Sample ID: MID-1-5704

Lab Sample ID: Matrix:

M39312-3 AQ - Ground Water Date Sampled: 05/07/04

Date Received: 05/10/04 Percent Solids: n/a

Project:

Global Petroleum, Revere MA

General Chemistry

Analyte RL Units DF Result **Analyzed** Method $\mathbf{B}\mathbf{y}$

Petroleum Hydrocarbons < 0.61 0.61 mg/l 05/12/04 1 BF EPA 418.1

By

AP

Page 1 of 1

GMN1065

Client Sample ID: MID-2-5704 Lab Sample ID:

Matrix:

M39312-4

EPA 602

AQ - Ground Water

DF

1

Date Sampled: 05/07/04 Date Received: 05/10/04

n/a

Percent Solids: n/a

Method: Project:

Global Petroleum, Revere MA

Analyzed

05/12/04

Prep Date Prep Batch **Analytical Batch**

n/a

Run #1 Run #2

Purge Volume

MN27068.D

Run #1 Run #2 5.0 ml

File ID

Purgeable Aromatics, MTBE

CAS No.	Compound	Result	RL	Units Q
71-43-2 108-88-3 100-41-4 1330-20-7 1634-04-4	Benzene Toluene Ethylbenzene Xylenes (total) Methyl Tert Butyl Ether	ND ND ND ND ND	1.0 1.0 1.0 1.0 1.0	ug/l ug/l ug/l ug/l ug/l
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
	2,3,4-Trifluorotoluene	87%		61-124%

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Page 1 of 1

Client Sample ID: MID-2-5704

Lab Sample ID:

M39312-4

Matrix:

AQ - Ground Water

Date Sampled: 05/07/04

Date Received: 05/10/04

Percent Solids: n/a

Project:

Global Petroleum, Revere MA

General Chemistry

Analyte Result \mathbf{RL} Units DF Analyzed By Method

Petroleum Hydrocarbons

< 0.61 0.61 mg/l

1 05/12/04 BF

EPA 418.1

RL = Reporting Limit

Page 1 of 1

Client Sample ID: EFF-5704

Lab Sample ID:

M39312-5

Matrix: Method:

Project:

AQ - Effluent

EPA 602

Global Petroleum, Revere MA

Date Sampled:

05/07/04 Date Received: 05/10/04

Percent Solids: n/a

File ID Run #1 MN27067.D Run #2

DF Analyzed 1 05/12/04

By AP **Prep Date** n/a

Prep Batch n/a

Analytical Batch

GMN1065

Purge Volume

Run #1 Run #2 5.0 ml

Purgeable Aromatics, MTBE

CAS No.	Compound	Result	RL	Units Q	
71-43-2 108-88-3 100-41-4 1330-20-7 1634-04-4	Benzene Toluene Ethylbenzene Xylenes (total) Methyl Tert Butyl Ether	ND ND ND ND ND	1.0 1.0 1.0 1.0 1.0	ug/l ug/l ug/l ug/l ug/l	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits	
	2,3,4-Trifluorotoluene	88%		61-124%	,

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Page 1 of 1

Client Sample ID: EFF-5704

Lab Sample ID: M39312-5
Matrix: AQ - Efflue

AQ - Effluent Date R

Date Sampled: 05/07/04 **Date Received:** 05/10/04

Percent Solids: n/a

Project:

Global Petroleum, Revere MA

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	$\mathbf{B}\mathbf{y}$	Method
Petroleum Hydrocarbons	< 0.61	0.61	mg/l	1	05/12/04	BF	EPA 418.1

Page 1 of 1

Client Sample ID: TP

Lab Sample ID: M39312-6

Matrix: Method:

Project:

AQ - Ground Water

EPA 602

Global Petroleum, Revere MA

Date Sampled: 05/04/04

Date Received: 05/10/04 Percent Solids: n/a

File ID DF Analyzed By **Prep Date** Prep Batch **Analytical Batch** Run #1 MN27066.D 05/12/04 AP n/a GMN1065 n/a

Run #2

Purge Volume

Run #1

Run #2

5.0 ml

Purgeable Aromatics, MTBE

CAS No.	Compound	Result	RL	Units Q
71-43-2 108-88-3 100-41-4 1330-20-7 1634-04-4	Benzene Toluene Ethylbenzene Xylenes (total) Methyl Tert Butyl Ether	ND ND ND ND ND	1.0 1.0 1.0 1.0	ug/l ug/l ug/l ug/l ug/l
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
	2,3,4-Trifluorotoluene	88%		61-124%

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

GC Volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Surrogate Recovery Summaries

Method Blank Summary

Page 1 of 1

Job Number:

M39312

Account:

CDM Camp Dresser & McKee

Project:

Global Petroleum, Revere MA

Sample	File ID	DF	Analyzed 05/11/04	By	Prep Date	Prep Batch	Analytical Batch
GMN1065-MB	MN27057.D	1		AP	n/a	n/a	GMN1065

The QC reported here applies to the following samples:

Method: EPA 602

M39312-1, M39312-2, M39312-3, M39312-4, M39312-5, M39312-6

CAS No.	Compound	Result	RL	Units Q
71-43-2 100-41-4 1634-04-4 108-88-3 1330-20-7	Benzene Ethylbenzene Methyl Tert Butyl Ether Toluene Xylenes (total)	ND ND	1.0 1.0 1.0 1.0 1.0	ug/l ug/l ug/l ug/l ug/l
CAS No.	Surrogate Recoveries		Limits	
	2,3,4-Trifluorotoluene	90%	61-124	%

Method Blank Summary Job Number: M39312

Page 1 of 1

Account: Project:

CDM Camp Dresser & McKee Global Petroleum, Revere MA

		mple MN1071-MB	File ID MN27139.D	DF 1	Analyzed 05/14/04	By AP	Prep Date n/a	Prep Batch n/a	Analytical Batch GMN1071
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The QC reported here applies to the following samples:

Method: EPA 602

M39312-1

CAS No.	Compound	Result	RL	Units Q
1634-04-4 108-88-3 1330-20-7	Methyl Tert Butyl Ether Toluene Xylenes (total)	ND	1.0 1.0 1.0	ug/l ug/l ug/l
CAS No.	Surrogate Recoveries		Limits	
	2,3,4-Trifluorotoluene	90%	61-124	%

Blank Spike Summary Job Number: M39312

Page 1 of 1

Account: Project:

CDM Camp Dresser & McKee Global Petroleum, Revere MA

Sample GMN1065-BSP	File ID MN27058.D	DF 1	Analyzed 05/11/04	By AP	Prep Date n/a	Prep Batch n/a	Analytical Batch GMN1065

The QC reported here applies to the following samples:

Method: EPA 602

M39312-1, M39312-2, M39312-3, M39312-4, M39312-5, M39312-6

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
71-43-2	Benzene	20	17.0	85	39-150
100-41-4	Ethylbenzene	20	15.8	79	32-160
1634-04-4	Methyl Tert Butyl Ether	20	18.4	92	65-122
108-88 - 3	Toluene	20	16.3	82	46-148
1330-20-7	Xylenes (total)	60	50.1	84	69-111
CAS No.	Surrogate Recoveries	BSP	Liı	mits	
	2,3,4-Trifluorotoluene	91%	61-	-124%	

Blank Spike Summary Job Number: M39312

Page 1 of 1

Account:

CDM Camp Dresser & McKee Global Petroleum, Revere MA

Project:

Sample	File ID	DF	Analyzed	Bv	Prep Date	Prep Batch	Analytical Batch
GMN1071-BSP			05/14/04	AP	n/a	n/a	GMN1071

The QC reported here applies to the following samples:

Method: EPA 602

M39312-1

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
1634-04-4	Methyl Tert Butyl Ether	20	19.5	98	65-122
108-88-3	Toluene	20	17.7	89	46-148
1330-20-7	Xylenes (total)	60	55.3	92	69-111
CAS No.	Surrogate Recoveries	BSP	Li	mits	
-	2,3,4-Trifluorotoluene	94%	61	-124%	

Matrix Spike/Matrix Spike Duplicate Summary

Page 1 of 1

Job Number:

M39312

Account: Project: CDM Camp Dresser & McKee Global Petroleum, Revere MA

File ID	DF	Analyzed	$\mathbf{B}\mathbf{y}$	Prep Date	Prep Batch	Analytical Batch
MN27060.D	1	05/12/04	AP	n/a	n/a	GMN1065
MN27061.D	1	05/12/04	AP	n/a	n/a	GMN1065
MN27063.D	1	05/12/04	AP	n/a	n/a	GMN1065
	MN27060.D MN27061.D	File ID DF MN27060.D 1 MN27061.D 1 MN27063.D 1	MN27060.D 1 05/12/04 MN27061.D 1 05/12/04	MN27060.D 1 05/12/04 AP MN27061.D 1 05/12/04 AP	MN27060.D 1 05/12/04 AP n/a MN27061.D 1 05/12/04 AP n/a	MN27060.D 1 05/12/04 AP n/a n/a MN27061.D 1 05/12/04 AP n/a n/a

The QC reported here applies to the following samples:

Method: EPA 602

M39312-1, M39312-2, M39312-3, M39312-4, M39312-5, M39312-6

CAS No.	Compound	M39258-2 ug/l Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
71-43-2 100-41-4 1634-04-4 108-88-3 1330-20-7	Benzene Ethylbenzene Methyl Tert Butyl Ether Toluene Xylenes (total)	0.14 0.011 1100 E 0.029 0.37	20 20 20 20 20 60	16.6 15.5 1110 16.0 49.6	82 77 50* ^a 80 82	16.5 15.4 1110 16.0 49.8	82 77 50* ^a 80 82	1 1 0 0 0	39-150/30 32-160/30 57-126/30 46-148/30 61-113/30
CAS No.	Surrogate Recoveries 2,3,4-Trifluorotoluene	MS 90%	MSD 90%	M3 87%	9258-2 %	Limits 61-1249	6		

⁽a) Outside control limits due to high level in sample relative to spike amount.

Matrix Spike/Matrix Spike Duplicate Summary Job Number: M39312

Account:

CDM Camp Dresser & McKee

Project:

Global Petroleum, Revere MA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
M39391-3MS	MN27166.D	1	05/17/04	AP	n/a	n/a	GMN1071
M39391-3MSD	MN27167.D	1	05/17/04	AP	n/a	n/a	GMN1071
M39391-3	MN27147.D	1	05/14/04	AP	n/a	n/a	GMN1071

The QC reported here applies to the following samples:

Method: EPA 602

Page 1 of 1

M39312-1

CAS No.	Compound	M39391-3 ug/l Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
1634-04-4 108-88-3 1330-20-7	Methyl Tert Butyl Ether Toluene Xylenes (total)	0.37 0.097 0.96	20 20 60	18.0 17.3 54.0	88 86 88	18.0 17.1 53.8	88 85 88	0 1 0	57-126/30 46-148/30 61-113/30
CAS No.	Surrogate Recoveries	MS	MSD	M39	9391-3	Limits			
	2,3,4-Trifluorotoluene	92%	92%	84%	Š.	61-124%	5		

Volatile Surrogate Recovery Summary

Page 1 of 1

Job Number: M39312

Account: CDM Camp Dresser & McKee Project: Global Petroleum, Revere MA

Method: EPA 602 Matrix: AQ

Samples and QC shown here apply to the above method

Lab	Lab					
Sample ID	File ID	S1 a				
M39312-1	MN27144.D	92.0				
M39312-1	MN27071.D	91.0				
M39312-2	MN27070.D	88.0				
M39312-3	MN27069.D	86.0				
M39312-4	MN27068.D	87.0				
M39312-5	MN27067.D	88.0				
M39312-6	MN27066.D	88.0				
GMN1065-BSP	MN27058.D	91.0				
GMN1065-MB	MN27057.D	90.0				
GMN1071-BSP	MN27140.D	94.0				
GMN1071-MB	MN27139.D	90.0				
M39258-2MS	MN27060.D	90.0				
M39258-2MSD	MN27061.D	90.0				
M39391-3MS	MN27166.D	92.0				
M39391-3MSD	MN27167.D	92.0				

Surrogate Recovery Compounds Limits

S1 = 2,3,4-Trifluorotoluene 61-124%

(a) Recovery from GC signal #2

General Chemistry

QC Data Summaries

Includes the following where applicable:

- Method Blank and Blank Spike Summaries
- Duplicate Summaries
- Matrix Spike Summaries

METHOD BLANK AND SPIKE RESULTS SUMMARY GENERAL CHEMISTRY

Login Number: M39312 Account: CDM - Camp Dresser & McKee Project: Global Petroleum, Revere MA

Analyte	Batch ID	RL	MB Result	Units	BSP %Recov	QC Limits
Petroleum Hydrocarbons	GP4420/GN13846	0.60	<0.60	mg/l	84.0	80-120%

Associated Samples:

Batch GP4420: M39312-1, M39312-2, M39312-3, M39312-4, M39312-5

DUPLICATE RESULTS SUMMARY GENERAL CHEMISTRY

Login Number: M39312 Account: CDM - Camp Dresser & McKee Project: Global Petroleum, Revere MA

Analyte	Batch ID	QC Sample	Units	Original Result	DUP Result	RPD	QC Limits
Petroleum Hydrocarbons	GP4420/GN13846	M39312-5	mg/l	<0.61	<0.61	0.0	0-20%

Associated Samples: Batch GP4420: M39312-1, M39312-2, M39312-3, M39312-4, M39312-5

MATRIX SPIKE RESULTS SUMMARY GENERAL CHEMISTRY

Login Number: M39312 Account: CDM - Camp Dresser & McKee Project: Global Petroleum, Revere MA

Analyte	Batch ID	QC Sample	Units	Original Result	Spike Amount	MS Result	%Rec	QC Limits
Petroleum Hydrocarbons	GP4420/GN13846	M39312-4	mg/l	<0.61	5.1	4.2	82.4	75-125%

Associated Samples: Batch GP4420: M39312-1, M39312-2, M39312-3, M39312-4, M39312-5

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

■ Sample Tracking Chronicle

1 -- ,)

Internal Sample Tracking Chronicle

Camp Dresser & McKee

Global Petroleum, Revere MA

Job No:

M39312

Sample Number	Method	Analyzed	Ву	Prepped By	Test Codes
M39312-1 INF-5704	Collected: 07-MAY-04	12:15 By: TAN	Receiv	zed: 10-MAY-04	By: RS
	EPA 418.1 EPA 602 EPA 602	12-MAY-04 12-MAY-04 08:27 14-MAY-04 21:17		11-MAY-04BF	PHC V602BTXM V602BTXM
M39312-2 CIN-5704	Collected: 07-MAY-04	12:20 By: TAN	Receiv	/ed: 10-MAY-04	By: RS
M39312-2 M39312-2	EPA 418.1 EPA 602	12-MAY-04 12-MAY-04 07:43		11-MAY-04BF	PHC V602BTXM
M39312-3 MID-1-570	Collected: 07-MAY-04 4	12:25 By: TAN	Receiv	red: 10-MAY-04	By; RS
	EPA 418.1 EPA 602	12-MAY-04 12-MAY-04 06:59	BF AP	11-MAY-04BF	PHC V602BTXM
M39312-4 MID-2-570	Collected: 07-MAY-04 4	12:30 By: TAN	Receiv	red: 10-MAY-04	By: RS
	EPA 418.1 EPA 602	12-MAY-04 12-MAY-04 06:16	BF AP	11-MAY-04BF	PHC V602BTXM
M39312-5 EFF-5704	Collected: 07-MAY-04	12:35 By: TAN	Receiv	ed: 10-MAY-04	By: RS
M39312-5 M39312-5	EPA 418.1 EPA 602	12-MAY-04 12-MAY-04 05:32	BF AP	11-MAY-04BF	PHC V602BTXM
M39312-6 TP	Collected: 04-MAY-04	14:30 By: TAN	Receiv	ed: 10-MAY-04	By: RS
M39312-6	EPA 602	12-MAY-04 04:49	AP		V602BTXM



CHAIN OF CUSTODY 495 TECHNOLOGY CENTER WEST • BUILDING ONE

495 TECHNOLOGY CENTER WEST • BUILDING ONE MARLBOROUGH, MA 01752 TEL: 508-481-6200 • FAX: 508-481-7753

ACCUTEST JOB #:	M39312	
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ACCUTEST QUOTE #:

	CLIENT INFO	RMATION		PTM / CO	FAC	ILITY IN	ORM/	ATION						A	NALYT	ICAL	INFOR	MATION		MATRIX CODES
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